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NETWORK A MEETING RECORD

Network A Plenary Meeting
October 27-29, 1999, Echternach, Luxembourg

Participants

Friedrich Plank, Austria
Luc van de Poele, Belgium-Flemish
Christiane Blondin, Belgium-French
Jean Britton, Canada
Jana Straková, Czech Republic
Niels Plischewski, Denmark
Pirjo Linnakylä, Finland
Thierry Rocher, France
Jochen Schweitzer, Germany
Judit Kádár-Fülöp, Hungary
Gerry Shiel, Ireland
Chiara Croce, Italy
Jean-Paul Reeff, Luxembourg
Fernando Córdova Calderon, Mexico
Arnold Spee, Netherlands
Jules Peschar, Netherlands
Rene Veenstra, Netherlands
Jan Peter Stromsheim

Glória Ramalho, Portugal
Uri Peter Trier, Switzerland
Erich Ramseier, Switzerland
Eugene Owen, United States
Andreas Schleicher, OECD Secretariat
Jay Moskowitz, Network A Secretariat
Maria Stephens, Network A Secretariat
Cathy Burch, NCES International Activities
Steve Schleck, Ministry of Education-Lux.
Robert Blank III, Ministry of Education-Lux

Regrets

Wendy Whitham, Australia
Evangelia Varnava-Skoura, Greece
Lynne Whitney, New Zealand
Guillermo Gil, Spain
Birgitta Fredander, Sweden

Summary of Major Decisions

The following decisions were taken at the meeting:

- With regard to the CCC/Self-Regulated Learning Questionnaire, Jules agreed to make minor revisions to the synthesis and technical papers and return them to the Network A and OECD Secretariats for distribution to ACER for the NPM meeting. The Network agreed to endorse the CCC/Self-Regulated Learning questionnaire proposed by the CCC Development Team including the use of non-rotation. The Network requested that PISA's Technical Advisory Group review the proposal regarding the placement of the CCC questionnaire in the assessment and provide guidance prior to the NPM meeting.

- With regard to the IT questionnaire, members endorsed the report of the field trial results (with minor revisions to be sent by Erich Ramseier), and the Network A Secretariat will send it to ACER for the NPM meeting.

- Network members agreed to have solid drafts of their chapters for Network A 2000 no later than December 15, with final drafts and Secretariat review by January 15. Members also agreed to review the final drafts on a rolling basis in January and February.

- The Network agreed to convene committees in each of three developmental areas (assessing reading in foreign languages, information communication technology, and integrated communication).

- The Network provided guidance in revising the TOR, which will be revised and circulated for members' review.

- The Network made suggestions for minor revisions to the proposal for the chapter on student achievement in EAG. Network members gave editorial discretion to the OECD Secretariat to reduce the chapter to fit the page limits. Countries will have an opportunity to review the final chapter.

- The Network provided guidance to the OECD on establishing a policy for non-Member participation in PISA. Basically, to protect instrument security and encourage high-quality implementation of the instruments, non-Member countries (that are not already involved in PISA) will be allowed to participate in PISA in separate cycle, under the oversight of the international project consortium provided that the main contractor is not overburdened.

- The Network supported the proposal to continue work in problem solving and are expecting to review a proposed list of experts to take the next steps in developing an assessment framework.

Welcome and Introduction

Eugene Owen opened the meeting and Jean-Paul Reeff welcomed members to Luxembourg. Eugene then introduced new members Christiane Blondin (Belgium, French), Thierry Rocher (France), Gerry Shiel (Ireland), and Erich Ramseier (Switzerland). He also expressed the regrets of Gella Varnava-Skoura (Greece), Lynne Whitney (New Zealand), Guillermo Gil (Spain), and Birgitta Fredander (Sweden) who were unable to attend the meeting.

Eugene began the meeting by reviewing the agenda and adding, at the request of members, an update on DeSeCo to the agenda. Members then adopted the minutes from the March meeting.

Update from OECD

Eugene then turned the floor over to Andreas Schleicher, who provided an update on OECD activities relevant to Network A.

Andreas began by reminding members about three recent OECD publications: the overview of PISA frameworks; the CD-ROM version of *EAG*; and, most recently, *Education Policy Analysis (EPA)*. He noted that the CD-ROM contained not only the indicators but all the data, as well, and described it as a "starting point" for this type of electronic publication. Regarding *EPA*, he gave a brief overview of the four areas of emphasis:

- Resource implications of lifelong learning,

- Early childhood education (a qualitative synthesis),

- Technology (a preliminary map of issues), and

- Tertiary education (with an emphasis on financing).

He also reminded members that the next edition of *EAG* would be published in April 2000.

Other INES Activities

- **Technical Group** (TG). After a major effort to adapt to the revisions of ISCED, the TG has recently been concentrating on developing a qualitative understanding of education systems' resources and spending. Furthermore, they are interested in analyzing economic growth across countries and in examining the impacts of human capital investment on that growth—in other words, in relating spending and outcomes.

- **Network C**. For current and future editions of *EAG*, Network C is focusing on the learning environment—on human resources, institutional structures and quality, and instructional technology. Regarding the timeline for their upper secondary school survey, an instrument is not expected until after the completion of PISA's main study.

- **Network B**. This Network is examining pathways to the labor market as a new field of study, with an eye toward developing an international module that may be added to, for example, national labor surveys.

PISA Participation

Andreas noted that as many as 13 countries had approached the OECD about participating in PISA, raising the issue of the policy of non-Member countries joining PISA. Andreas said that these countries were interested in PISA because they want to compare their students' to students in OECD countries and use PISA to address issues of equity and disparity. Andreas noted that OECD had been in conversations with other institutional players about possible options for non-Member participation (e.g., use of PISA instruments in a separate cycle). This issue was tabled for the moment, as it would be discussed later in the agenda, in relation to the TOR for the second cycle.

WEI

Andreas also provided a brief overview of the World Education Indicators (WEI) project. He noted that 20 countries were now participating in WEI and that a publication on the project was planned. The suggested outline for the publication is:

- Chapter 1, Country Profiles (qualitative, descriptive),

- Chapter 2, Meeting the Rising Demands of Education (quantitative, comparative), and

- Chapter 3, Mobilizing Resources (quantitative, comparative).

General Assembly

Andreas also described planning for the INES General Assembly meeting scheduled for 11-13 September 2000. He reminded members that the General Assembly convenes every five years in order to establish the broad directives for quantitative work in the INES project. This next meeting thus will focus on the period 2001-2006.

At its recent meeting, the INES Steering Group spent time thinking about a draft agenda that could be reviewed by the Education Committee. Since the focus of the last General Assembly meeting was outcomes, the Steering Group supported the focus of this meeting to be on linking outcomes to policies to improve education and gaining a better understanding of the social and economic effects of education (e.g., better measurement of both the predictors and returns to education). Several initial ideas were put forth for inclusion on the agenda:

- External panel of users to answer question, "what has INES delivered?"

- Self-evaluation of the Networks, what were the successes and obstacles and how can they move forward?

- Discussion on estimating economic returns to education

- Discussion on the determinants of educational performance, perhaps focusing on national perspectives

- Discussion of cross-cutting issues (e.g., progress toward lifelong learning, equity in access/outcomes)

- Review of the methods and processes of INES and thoughts about publications and dissemination in the future

The group then had a question and answer session. Of note:

- Luc Van de Poele suggested that the self-evaluation of the Networks could lead to suggestions to improve/new directions for the TOR, which should be kept in mind as the new TOR is revised.

- In reflecting on the plans for the General Assembly meeting, Uri Trier suggested that this would be a good time for the INES members to think strategically about how to develop education systems based on the lessons learned…what is the state-of-the-art in different countries?

- Also related to the General Assembly, the Network decided that if they were asked to do a self-evaluation, a committee would be convened.

Finally, Eugene asked for clarification on the plans for EAG, being concerned about unforseen changes or a shift away from a quantitative focus. Andreas said that there had been no significant changes to the outline presented at the March meeting.

Review of the Field Trial Results of the CCC Option

Eugene then turned the floor over to Jules Peschar and René Veenstra to describe the current state of development of the instrument to measure students' self-regulated learning.

Jules presented three reports: a synthesis report, a technical report, and a theoretical background paper. Together, these reports give a historical overview of the CCC/Self-Regulated Learning project, the development of the instrument, and the results of the field trial. Since the Network's last meeting in March, the CCC team, led by Jules and the University of Groningen, had drafted an analysis plan for the field trial, analyzed data from the complete set of countries participating in the field trial of the instrument (22), drafted the reports, convened experts to review the reports and make recommendations for the final instrument, and revised the reports, as distributed.

Jules described the experts' decision making process. First, he noted two inherent constraints on the instruments: (1) separate samples did not allow the team to examine each item in relation to all other items and (2) a desire to reduce the number of items to ten-minutes worth.

He also noted the criteria used to guide decisions to keep scales: (1) scales should possess strong psychometric properties; (2) scales should provide broad coverage of the domain; and (3) dimensions should have multiple scales. The experts also considered the policy malleability and curricular value of the scales when making determinations. Using these criteria, the experts recommended that the final instrument include 3 dimensions and 14 scales (from the original 7 dimensions and 23 scales):

- **Learning strategies**, including scales on memorizing, elaboration, and control strategies;

- **Motivation**, including scales on instrumental motivation, interest motivation subject related, action control, effort and persistence in learning, and cooperative and competitive learning; and

- **Self-concept**, including control expectation, self-efficacy, verbal self-concept, self-concept in math, and overall academic self-concept.

Jules noted that the choices were made according to the criteria with two exceptions: memorization and cooperative learning, each of which had somewhat weak psychometric properties. Memorization was kept for domain coverage reasons and to complete a dimension in which other scales worked well. (As Judit Kádár-Fülöp later pointed out, the potential variation across countries and relation to student outcomes make it an interesting scale to try keeping.) Cooperative learning was kept because experts thought it was a scale that could yield interesting results and that slight re-wording of the items (as demonstrated from other sources) would improve its results.

Jules also reported that experts had made two additional recommendations: (1) that there should be a single CCC questionnaire (i.e., no rotation) and (2) that the CCC questionnaire be given before the subject assessments, so that students' responses would not be affected by their experience with the assessments themselves.

Finally, Jules presented possible reporting options—one in which the three dimensions were outcome measures on their own and one in which they were related to each other and to student achievement.

The Network had a lively and stimulating conversation about the results of the field trial. All who spoke thanked Jules and his team for the effort. Two issues that were discussed at some length were concerns that the resulting questionnaire still represented the domain as envisioned by experts and concerns about the placement of the questionnaire in the overall assessment. In responding to the first concern, both Jules and Luc emphasized that because of the broad criteria used to select (policy relevance/malleability, high technical validity, content coverage), the selection process went very smoothly and there was consensus among experts that the resulting questionnaire was solid. Furthermore, Luc pointed out that even the initial group of 7 dimensions wasn't intended to be completely comprehensive, so the reduction to the most useful, interesting, and well functioning items did not represent a sudden loss to the questionnaire.

Regarding the question about the placement of the questionnaire, members were of varied opinions. Some members strongly supported its placement at the front of the assessment, so that students' responses would not be affected by their performance on the assessments. Others were concerned that since the overall PISA assessments would be fundamentally different from country to country based, if only some countries participated in the CCC option and spent the first 10 minutes on the questionnaire. It also raised the question, then, about the placement of the 20-minute student questionnaire.

Chiara Croce asked if the countries who did not participate in the field trial were definitely not participating in the CCC option in the main study. Andreas responded that most of those countries were actually undecided and that he thought there was high potential for these countries to join the effort, if strong evidence could be provided to the NPMs to help inform their decisions.

Summation

Jules agreed to make some minor revisions to the reports (e.g., presenting the questionnaire in its final form rather than categorically grouped) and return them to the Network A Secretariat the week of 1 November:

Eugene proposed wording for a final recommendation, which was accepted by the Network:

> *Network A endorses the CCC/Self-Regulated Learning questionnaire proposed by the CCC Development Team including the use of non-rotation. The Network requests that PISA's Technical Advisory Group review the proposal regarding the placement of the CCC questionnaire in the assessment and provide guidance prior to the NPM meeting.*

Update from the PISA Field Trial

Andreas commented briefly on the PISA field trial and related events (e.g., the 11-12 October meeting of the Cultural Review Panel). Mainly, he called members' attention to the report on the results of the reading, mathematics, and science assessments that was in the briefing book, and noted that according to experts, the PISA field trial was a success story. He also mentioned that significant progress had been made in improving the questionnaires.

Update on Network A 2000

Maria Stephens then provided an update on Network A 2000, the proposed volume of essays that the Network would like to publish for the General Assembly meeting in 2000. She described that the purpose of the volume was to document the advances in the fields of student assessment and indicators and to look forward to the likely issues, developments, and challenges in those fields in the next decade.

At the time of the meeting, four drafts were included in the briefing book (overview-US/ES; CCC-NL; multi-level modeling-NL; issues in comparison-FI), as well as a proposal for a fifth chapter (new approaches to indicators-FR). The four chapters presented in the briefing book had been through at least one round of review by the Secretariat. She noted that the main recommendation, in each case, had been for authors to emphasize the prospective angle rather than the retrospective angle. Maria also noted that we still had commitments for additional chapters from: Friedrich Plank and Douglas Hodgkinson, who were awaiting survey results to revise their chapter; Scott Murray for adult literacy; Gertrudes Amaro for math literacy; and Eckhard Klieme for problem solving as a cross-curricular competency.

Maria asked for guidance from the OECD in setting deadlines for final drafts and asked for comments from members on the chapters presented and proposed. One member asked about the status of the reading literacy chapter, originally proposed by New Zealand. Maria described that, while New Zealand was (and still is) supportive of the chapter, they had been unable to find an expert with time available to prepare the chapter. Another member commented that the chapter on issues in comparison required focusing, as it was currently too lengthy. Andreas supported the style of the overview chapter and the detailing of issues to think about. Another member commented that there should be an historical overview of Network A. Eugene said that the Network A Secretariat would add such a description as a prologue, etc.

Several members were concerned about the proposed chapter on new approaches to indicators. This brought up a point, on which there was some debate. Andreas expressed the view that the volume should describe the "state of play" of the Network and reflect a consensus of views. In addition, Eugene, felt that the volume could entertain a variety of positions, as long as they were appropriately toned (so they would be accepted during the review process) and technically supported.

Regarding deadlines, Andreas noted that General Assembly participants would need the volume by July, which means the volume must go into printing in March. Thus, Eugene proposed that for those countries that had not yet turned in revised drafts, they would be due December 15, with review and final drafts by January 15. For those countries that have turned in drafts, the Network A Secretariat will work with authors to finalize chapters on the same or earlier

deadlines. All Network members will receive copies of the final chapters for an open review and comment period prior to submitting them to the OECD. This review process will occur on a rolling basis in January and February.

Update on DeSeCo/ILSS

Eugene and Erich then updated members on the DeSeCo symposium that was held 14-15 October and on future plans for this activity. The symposium drew together experts from a variety of disciplines to review and discuss five expert papers that were prepared for the symposium on the competencies that are necessary for success in life and society. Eugene noted that it was a very interesting and informative seminar, in which some views on "key competencies" were shared, but the approaches to defining or organizing them were quite different. Erich reiterated the wide range of expertise at the symposium and the interest in this field and, hence, the challenge in developing a neat, theoretical model for this field.

Eugene said that Network members would receive a brochure that provides an overview of this phase of the DeSeCo activity. The next planned activity from DeSeCo is to produce a synthesis report from the symposium and to obtain country comments. The DeSeCo coordinators also are considering convening a second symposium. DeSeCo coordinators have identified Network A as a possible group to help coordinate a review of the synthesis document and obtain country comments. We expect to have a report on this activity and information on possible Network A involvement from coordinators at our next meeting.

At the end of this session, Eugene briefly responded to questions about the status of ILSS. He explained that although the project had difficulty achieving its ambitious development objectives, the project was ready to move forward with four domains: two literacy scales, numeracy, and analytic reasoning (a component of problem solving). Additionally, questionnaires on IT and teamwork were still being explored. Several members asked about linkage between PISA and ILSS (e.g., in mathematics and problem solving). Eugene remarked on the distinctions between the two programs—in part because of the different constraints on the two assessments and different development processes—and suggested that there would be value in countries participating in both to articulate one from the other.

Update on the Evaluation of PISA

To open the second day of the meeting, Andreas gave an update on the progress of the evaluation of PISA. He described progress that had occurred since our last meeting—namely, that nominations had been sought from the BPC and an external panel of experts had been commissioned by the OECD to review various PISA products. He noted that the only change to the scope of the evaluation task, which had been reviewed by the Network in March, was the addition of experts in an "overall" category of expertise. Jeanne Griffith, Neville Postelthwaite, and Hans Gunter-Rolff had agreed to serve in that capacity. Additionally, there are experts related to reading mathematics, science, and other technical areas. Reports of their reviews of various documents are expected in mid-November.

Andreas reported that the INES Steering Group was very keen on the prospective role of the evaluation panel. It was thought that their short-term recommendations would be used by the OECD for improving implementation and that Network A might be instrumental in implementing any medium-term recommendations. Members asked for clarification about how the process of implementing recommendations (and getting them to the appropriate body) would work. It was suggested that perhaps a joint group of BPC and Network A members could be convened to discuss findings and make recommendations to the Steering Group as to next steps. Andreas noted that one benefit of the evaluation was that it obligates a detailed level of documentation, which is a challenge in a project of this magnitude.

Review of the Field Trial Results of the IT Questionnaire

Jay Moskowitz presented the results of the field trial of the IT questionnaire. He noted that the results were from 11 countries, but were considered to be a sufficient number from which to draw conclusions for revising the questionnaires. He noted that classical item analysis procedures were followed and that the basic conclusion was that the questionnaire worked.

Erich pointed out that applying a 5- or 7-factor analysis (rather than 3- or 4-) might present a slightly more conservative and reasonable set of recommendations. It also was suggested that the Network simply recommend that ACER use the ETS model since we know broadly that the questionnaire "works" in our settings. Since this discussion did not impact the development of the final instrument, it was agreed to send the report to ACER for their and the NPMs final decision.

New Development Areas

Eugene then turned the conversation to possible new development areas. In the discussions surrounding the revision of the TOR and the future of PISA, three new areas for assessment had been proposed by Network members: information technology, integrated communication, and reading in a second language. Presentations were given on each topic, prior to discussion on any of them.

Information Technology

Jean-Paul gave an interesting and thoughtful presentation on information technology as a new development area. He opened with an account of students' use of the Internet to communicate about going on strike—indicating the pervasiveness of the Internet and integrated place it holds in the lives of many students, to the (sometimes) surprise of older generations. He used this story further to distinguish the focus of this proposed new developmental area from previous efforts. Such a development area would focus on the assessment of students' "literacy" with, he preferred the term, information communication technology (ICT), rather than simply their use of technology or their familiarity with it. He used the term "a networked life" to describe the potential of ICT to contribute to citizens' functioning in society. He suggested that PISA needed an instrument that would measure students' skills in using ICT to be successful in their professional and personal lives in an information society.

Integrated Communication

Uri Trier then described the proposal for exploring an assessment of integrated communication in PISA. He questioned the notion of literacy as the key to language comprehension and understanding, giving examples of the oral traditions of primitive cultures for sharing knowledge and the skills of pre-reading children for absorbing and communicating information. He noted that literacy, as we think of it, is but a portion of the important competencies related to language.

Uri distributed a hand-out that provided an overview of some of the literature that existed related to the assessment of language skills other than reading. He asked members to think about where such an expanded language assessment (e.g., of reading, writing, speaking, and listening) might fit in PISA and its importance for PISA. He suggested a small group meeting or a mandate to experts to describe the state-of-the-art in this field.

Reading in a Foreign Language

Eugene then described the third area: reading in a foreign language. He described an idea to address foreign languages. He suggested that a set of items from the reading assessment (e.g., the easier items) could be used as an assessment of students' reading literacy in a foreign language, as these items are already available in 17 languages.

He had consulted with Irwin Kirsch, the Chair of PISA's Reading Functional Expert Group (RFEG), about the feasibility of this idea. Irwin was generally supportive of the idea and thought it had the potential to work. He noted that it would not be a test of foreign language abilities, rather one of foreign language reading abilities. He suggested that the benefits of the approach are that it would be cost-effective and that we know how PISA scales across countries already. He suggested that the most difficult work to develop this idea would be in determining the population and drawing the sample.

Open Discussion on Development Areas

There was a long discussion on the different development areas. Many members voiced their differing priorities and most members supported at least exploring all three areas. Technical considerations were raised (e.g., sampling issues related to an assessment of IT literacy; inter-rater reliability in marking tests of oral or written communication) and there was a somewhat lengthy discussion related to how countries would select the foreign languages to assess.

Summation

Eugene suggested that members volunteer to serve on committees. Each committee would be charged with developing a "proposal to proceed in this area" prior to our next meeting, where Network members could then decide upon next steps. Three committees were established:

- **Information Communication Technology**. Jean-Paul Reeff, Fernando Cordova, Glória Ramalho, Arnold Spee, Jan Peter Stromsheim, and Pirjo Linnakylä volunteered. Jean-Paul and Fernando will take responsibility for this committee.

- **Integrated Communication**. Gerry Shiel and Uri Trier volunteered. Arnold Spee nominated Jules Peschar, as well, and Austria and Hungary voiced their support for the work of the group in general but were unable to commit to participating at the time. Gerry will take responsibility for this committee.

- **Reading in Foreign Languages**. Eugene Owen, Jana Straková, Fritz Plank, and Christiane Blondin volunteered. Eugene will take responsibility for this committee.

Terms of Reference for the Second Cycle of PISA

To end the afternoon of the 27th, the Network turned to the TOR. Eugene described the revisions that had been recommended by the BPC at their meeting earlier in October and then opened the floor to comment. Thierry Rocher shared two concerns: one related to the explicit linking of PISA and ILSS and the other on problem solving as a mandatory domain. Related to problem solving, he stated that France could not commit to participation in PISA if problem solving were made a fourth area of assessment prior to the completion of the framework and the chance for countries to review it. There were serious concerns about this among several members. However, Eugene pointed out that the decision made at the BPC meeting to delay the incorporation of problem solving as a mandatory domain until after the framework was available made the continued conversation somewhat moot.

Members discussed several other issues related to the TOR. For instance, Jochen Schweitzer urged the inclusion of a framework for the questionnaires [which will ultimately result in a reconstitution of the Network's APOI group to address this]. Arnold pointed out the disjoint between the "equal" but "optional" status of CCCs in relation to the main assessments. Several members also stressed the importance of delineating the role of the Network and the bidder related to problem solving development and overall concerns about student testing time, especially with the incorporation of problem solving.

The Network A Secretariat promised to revise the TOR according to the conversation and circulate it to members for review.

EAG 2000 Chapter on Student Achievement

Now into a special night session, the Network reviewed the draft chapter for EAG on student achievement. The chapter includes two parts: the first which gives an overview of gender differences, followed by five examples of national analyses of TIMSS data related to gender; and the second which presents four indicators on TIMSS data and Populations 1 and 2. Eugene advised the Network that the chapter presented had to be reduced and that at least one of the indicators had to present the overall distribution of scores in mathematics and science in Populations 1 and 2 (e.g., as presented in *EAG* 99).

In regard to the country profiles, Erich suggested that Austria present their results as straight means, rather than girls' scores as a percentage of boys' scores, because of the difficulties in interpretation posed by the lack of uniform reference point (e.g., differing boys means in different subject areas).   Erich also suggested that the charts on overall gender differences be

reorganized to allow easier comparison from one population to another within the same country. Jay mentioned that because of the differing sets of countries, this would be difficult, but it would be explored. Andreas also added, with the support of other Network members, that the discussion and charts on gender differences must include some limited information on Population 3. Some members voiced their priorities among the different indicators, but it soon became clear that there was no clear consensus on which indicators to prioritize and that the preferences that were expressed were not deeply held. The Network decided to allow OECD to reduce the chapter as needed.

Policy for Non-Member Participation in PISA

After being initially brought up during Andreas' OECD Update and later in relation to the language currently in the TOR, the Network returned to the issue of non-Member participation in PISA. Andreas described the current picture and the questions before the Network:

- **Now**: Several non-Member countries are participating in the first cycle of PISA with observer status. That is, they administer the instruments as do Member countries but have no voice in development.

- **Issue**: As many as 13 non-Member countries have requested to participate in PISA. The OECD needs the guidance of the Network regarding a policy for non-Member participation. One scenario is to allow non-Member countries to use the instruments in separate cycle following the completion of the main study in participating countries. This scenario raises questions, such as should the separate cycle be implemented by the main cycle contractor?

Most Network members felt that non-Member participation was acceptable in controlled circumstances. Jana Straková emphasized that a controlled setting was necessary not only for instrument security but also to allow non-Member countries to profit fully from their endeavors.

There was some discussion about the possibility of overburdening the contractor, if the main study contractor is required to manage the separate cycle, and about the timeline of non-Member participation. Regarding the former, some members thought that dividing the work of the main study and the separate cycle between different members of the consortium might solve that problem. Uri urged that it would be unwise to operate the separate cycle completely outside the consortium, because of the enormous advantage the contractor would have in terms of processes. Regarding timeline, members pointed out that the separate cycle would probably be implemented more than one year after the main study, because of testing in the Southern Hemisphere.

Some members asked about financial arrangements, and they were advised that the participation of non-Member countries would be completely self-financed or financed possibly with the assistance of the World Bank—that OECD's level of involvement would, in fact, be marginal and there would be no costs to members.

Finally, Andreas asked members what they thought about requests by Member countries to use the PISA instruments in national studies, prior to the completion of the main study. Network members gave a resounding no.

Problem Solving Development Activity

The third and final day of the meeting was devoted to discussions on the problem solving development work. The Network first received an update from Ann Borthwick on the map of the domain. Then, the Network received an update and discussed a plan for proceeding with the second phase of development work.

Map of the Domain

Ann Borthwick distributed revised copies of the Map of the Domain and the Annotated Bibliography. She said that the map reflected continued work in reviewing the literature and information gained in a meeting with the team responsible for the problem solving option in PISA in Germany (i.e., Klieme and colleagues from Max Planck). [Members will get a more detailed update on the German results at the next meeting.]

Ann elaborated on the differences and similarities between the two major schools in the field— cognitive psychology and the complex problem solving. She suggested that the Network's assessment may well situate itself here, in the convergence of these two schools. One point that was made that had particular relevance for the Network is that how knowledge is structured affects the strength of the strategies applied—that is, without a content or context base, weak heuristics are applied from which we may learn little about problem solving. This raises major questions as to whether problem solving can be measured as a separate domain or if it is inevitably tied to its context and content.

Many members responded with questions and thanked Ann for her work. One thing that became clear is that defining the placement of the problem solving (in or out of content) and what we mean by cross-curricular will be major challenges for the second phase of work.

Transition to Phase II of Development Work

Eugene directed members' attention to a proposal in the briefing book for completing the second phase of problem solving work, the development of an assessment framework. He noted one suggested modification to the process outlined in the book. Rather than have two expert meetings, the first meeting would be a small—6 to 8 people with demonstrated expertise in problem solving for the purpose of providing guidance to draft a framework—and the second meeting would be larger—including a slightly wider range of expertise for the purpose of reviewing the draft framework. The first meeting is proposed for December and the second meeting is proposed for February.

Eugene noted that the small group of experts (who would also participate in the second meeting) would be covered under the proposed OECD contract. The larger group is not covered in the proposed contract and Network A countries would have to sponsor those members voluntarily.

Eugene asked that any nominations for experts for either group be given to him at the meeting or sent to the Network A Secretariat by 5 November. Some members inquired about the procedures

for establishing the small and large groups, and Eugene suggested that he propose a balanced group of experts during the week of 8 November for review and approval by Network members.

Several other questions were raised: (1) How will financing be sought? (2) What is the relationship of Network A to BPC to the bidder/contractor with regard to problem solving? With regard to (1), Andreas responded that the usual procedures would be followed: the proposal would be presented to the Education Committee and, on approval, a letter would be sent to Ambassadors requesting their voluntary contributions to support this activity. With regard to (2), it was agreed that these relationships would be explicit in the TOR. The bidder/contractor will be required to build the problem solving instruments (whether in subject domains or separately) from the Network-approved framework to be developed. As always, the framework and instruments would also be reviewed for approval by the BPC.

Final Remarks and Next Meeting

Eugene thanked Jean-Paul and his staff for excellent organization and hospitality; the translators for their hard work and late night; the OECD and Network A Secretariats for their efforts to prepare the meeting; and the members for their enthusiastic participation. Earlier in the meeting, Uri Trier had announced his retirement from Network A; (re-) introduced his successor, Erich Ramseier; and offered his good-byes and good wishes. The Network wishes Uri a fond farewell and looks forward to possible future collaborations.

The next meeting of Network A will be held in conjunction with the Board of Participating Countries meeting. The Network will meet in New Zealand, likely 8-10 March. The BPC will meet in Australia on 13-15 March. Information about the dates and venue for the next meeting will be circulated as soon as possible, since the travel plans required will be significant.

The meeting was adjourned.